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**PROGRAM DOCUMENTATION AND  
REPORTING REQUIREMENTS:  
REDUCING THE BURDEN ON  
PROGRAM MANAGERS**

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JUL 09 1990  
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Linda S. Brandt  
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1. Enclosure (1) is forwarded as a matter of possible interest.
2. This research memorandum, one of a series reporting on the Program Documentation and Reporting Requirements Study, provides an overview of the findings and recommendations of that study. The study team found that documentation and reporting requirements do impose a significant workload burden on program management offices, and that much of the problem is rooted in duplicative reporting requirements and inconsistent policy and procedural guidance.
3. The study led to a number of recommendations for improvement which were presented to the Under Secretary of the Navy, who was also the Navy's Service Acquisition Executive. These recommendations are the basis of a phased, ongoing implementation effort involving the three military departments, OSD, and the Congress.

*Christopher Jehn*  
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Director  
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## ABSTRACT

This study, "Program Documentation and Reporting Requirements: Reducing the Burden on Program Managers," began in 1987 at the request of the acting Assistant Secretary of the Navy for Research, Engineering and Systems (ASN-RE&S). He expressed concern that the proliferation of requirements for documentation and reporting interferes with program managers' ability to do their primary job, the efficient acquisition of quality weapon systems. During the early part of the study, two separate but related issues also became matters of concern: Defense Enterprise Programs (DEPs) and baselining. Those two topics are also addressed briefly in this memorandum. This memorandum provides an overview of the study.

The study found that, indeed, the problem is real. Documentation and reporting requirements impose a significant workload burden. In NAVAIR, for example, nearly 20 percent of the available, in-house manyears and 30 percent of senior management's time are devoted to the paperwork burden. For a variety of reasons this burden was somewhat less in the other Systems Commands and in the Army and in the Air Force. Much of the problem is rooted in duplication and overlap (some legislatively caused) and in inconsistency in policy and procedural guidance.

The study led to a number of recommendations for improvement which were presented to the Under Secretary of the Navy who was also the Navy's Service Acquisition Executive (SAE). The Under Secretary endorsed these recommendations in August 1988, and Navy staff, with continuing analytical support provided by CNA, has been working with the other Services and with OSD since that time to carry out a phased implementation effort.

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## INTRODUCTION

This research memorandum summarizes the results of a study of the documentation and reporting requirements for Naval procurement programs. The study analyzed the burden that these requirements place on program managers, explored the perceptions of users of such documents, and suggested options for improvement.

This study began in 1987 at the request of the acting Assistant Secretary of the Navy for Research, Engineering and Systems (ASN-RE&S). He had expressed concern that the proliferation of requirements for documentation and reporting interferes with program managers' ability to do their primary job, the efficient acquisition of quality weapon systems. During the early part of the study, two separate but related issues also became matters of concern: Defense Enterprise Programs (DEPs) and baselining. Those two topics are also addressed briefly in this memorandum.

The study led to a number of recommendations for improvement which were presented to the Under Secretary of the Navy, who was at the time also the Navy's Service Acquisition Executive (SAE). The Under Secretary endorsed these recommendations in August 1988, and Navy staff, with analytical support from CNA, has been working with the other Services and with OSD to carry out a phased implementation effort.

This research memorandum provides an overview of CNA's analysis from its beginning in August 1987 to the presentation of recommendations to then-Under Secretary Garrett in August 1988. A number of topics discussed briefly in this memorandum deserve fuller treatment and are the subjects of separate, forthcoming CNA research memorandums. These supplementary memorandums cover baselining and deviation reporting, reformatting the Selected Acquisition Report (SAR), and more detailed analyses of the results of both the Report Producers' Questionnaire and the Report Users' Questionnaire. Another forthcoming CNA research memorandum will report on CNA's analytic assistance to the Navy in carrying out the implementation effort directed by Under Secretary Garrett.

## METHODOLOGY

The study team used four research techniques:

- Extensive interviews with acquisition experts from OSD and each of the Services
- A review of format, content, and source authorities for 22 DOD-wide acquisition-related reports and documents

- A questionnaire administered to producers of reports and documents in 45 Navy, 25 Air Force, and 15 Army Program Management Offices (PMOs)
- Interviews with 26 users of reports and documents in the Services, OSD, Congressional staffs, the Congressional Budget Office (CBO), and the Office of Management and Budget (OMB)

The study's findings and recommendations are based on a synthesis of the results from these research activities.

#### **Interviews With Acquisition Experts**

The study began with interviews of acquisition personnel in the Navy, Army, Air Force, and Office of the Secretary of Defense (OSD). Those interviewed included program managers and staff members, contracting officials, and oversight and policy personnel. These "reconnaissance" interviews provided experts' insights into acquisition-related reporting and documentation and helped provide focus for the study.

#### **Review of Acquisition Documents**

The study team characterized the reports and documents analyzed as either status reports or decision documents. Status reports were defined as primarily reporting vehicles. Their issuance and acceptance are driven more by the calendar than by decision points for programs, and future actions are not necessarily contingent on their approval. The Selected Acquisition Report (SAR) and the Unit Cost Report (UCR) are examples of status reports. Decision documents are those documents that do require approvals, and future actions are almost always contingent upon those approvals. The Test and Evaluation Master Plan (TEMP) is an example of a decision document. It must be approved by a variety of authorities within a Service and in OSD before a program can proceed with a planned test.

The study team examined 22 DOD-wide acquisition reports and documents, listed in table 1, but placed special emphasis on four major status reports and six primary decision documents. The status reports were the Selected Acquisition Report (SAR), Congressional Data Sheets (CDSs), the Unit Cost Report (UCR), and the Defense Acquisition Executive Summary (DAES). The decision documents were the Test and Evaluation Master Plan (TEMP), the System Concept Paper (SCP), the Decision Coordinating Paper (DCP), the Acquisition Plan (AP), the Cost and Operational Effectiveness Analysis (COEA) report, and the Program Baseline document.

Table 1. Reports and documents examined in the study

	Abbreviation
Selected Acquisition Report	SAR
Defense Acquisition Executive Summary	DAES
Unit Cost Report	UCR
Unit Cost Exception Report	UCER
System Concept Paper	SCP
Cooperative Opportunities Document	-
Acquisition Strategy Report	-
Common-Use Alternatives Statement	-
Cost and Operational Effectiveness Analysis	COEA
Competitive Prototyping Strategy Report	-
Test and Evaluation Master Plan	TEMP
Mission Need Statement	-
Independent Cost Estimate	ICE
Decision Coordinating Paper	DCP
Program Baseline Document	-
Baseline Deviation Report	-
Manpower Estimate Report	-
Congressional Data Sheet	CDS
Program Element Descriptive Summary	-
Acquisition Plan	AP
Business Clearance	-
Contract Award Report	-

In-depth analysis was focused on these ten special-interest reports and documents. The main areas of investigation were content, format, internal and external consistency, overlap and duplication, and their sources of authority (Navy/DOD directives, the Federal Acquisition Regulation (FAR), the Defense Supplement to the FAR (DFAR), OMB Circulars, and statutes).

#### Questionnaire

The study team also prepared a detailed questionnaire, covering about 400 items, to be administered to program office personnel. It elicited information on program office size, percent of senior management time involved in document preparation and review, and the time and effort involved in preparing and obtaining approval for the ten

key DOD-wide reports and documents mentioned earlier. It also provided the opportunity for program office personnel to rate their perceptions of the internal and external usefulness of the documents, to identify document overlap, and to offer their thoughts on improving the system. The results of these questionnaires were subjected to validity checks and were found, with few exceptions, to contain useful data.

While the initial focus was on 45 Navy program offices spread among the three major hardware Systems Commands (NAVAIR, NAVSEA, and SPAWAR), subsequently the survey effort was expanded to include 15 Army and 25 Air Force program offices. Their cooperation and support were excellent, and the findings have been shared with them.

#### Interviews With Users

Finally, the study team conducted in-person interviews with 26 users of the reports and documents in the Navy, OSD, Office of Management and Budget (OMB), Congressional Budget Office (CBO), and Congressional staffs. The interviewees were questioned about their views concerning document utility, format, content, and possibilities for improvement.

#### FINDINGS

##### The Problem Is Real

A major finding of the study is that the problem as presumed in the tasking memorandum is real. Documentation and reporting requirements impose a significant workload burden, and there is duplication and overlap.

##### *Overall Burden and Program Office Size*

Table 2 shows the reported estimates of effort invested by program management offices (PMOs) in all forms of acquisition documentation and reporting, as well as median program office size in terms of assigned, in-house, full-time-equivalent (FTE) professional staff.<sup>1</sup>

---

1. All numbers shown in table 2 and throughout this section are medians rather than means. In analyzing quantitative data from the producers' questionnaire, the study team consistently used medians rather than means as a measure of central tendency. Because of the relatively small sample sizes and the wide range of values found in the answers provided, a few "outliers" could badly distort a mean.

Table 2. Effort invested by each program management office in documentation and reporting<sup>a</sup>

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Navy	-	1.5 man-years	(In-house PMO FTE = 20.0)
NAVAIR <sup>b</sup>	-	4.0 man-years	( " " = 21.0)
NAVSEA <sup>c</sup>	-	1.0 man-years	( " " = 18.0)
SPAWAR <sup>d</sup>	-	1.0 man-years	( " " = 25.5)
Army	-	2.5 man-years	( " " = 38.0)
Air Force	-	2.5 man-years	( " " = 50.5)

---

a. Median values.

b. Naval Air Systems Command.

c. Naval Sea Systems Command.

d. Space and Warfare Systems Command.

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The data prompt several observations:

- Documentation and reporting consume a significant fraction of total in-house effort within program management offices. In the case of NAVAIR it is about 19 percent, plus some unknown additional burden carried through the use of contract support services. In the case of the Army, the apparent burden is about 7 percent, but the Army uses contract support services for this function too, and at about the same level as NAVAIR. Thus, the real burden for the Army is undoubtedly higher than the apparent 7 percent. The Air Force data require some interpretation, as noted below, but their actual burden is probably on the order of 10 percent.<sup>1</sup>
- NAVAIR expends more effort in-house than do the other two Navy Systems Commands--a result of NAVAIR's much lower, but still significant, dependence on contract support services for this function. (The Navy has taken steps to augment staffing of NAVSEA program offices in order to reduce their disproportionate dependence on contractor support.) It seems a reasonable assumption, however, that if the differential use of contract support services were taken into account, the documentation and reporting burden in NAVSEA and SPAWAR would approximate that of NAVAIR.

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1. Unfortunately, only relative measures of the use of contract support services for this function were available from the questionnaire, not absolute amounts.

- The overall reporting burden is more severe in the Navy than in the Army or Air Force because of the relatively small size of Navy program offices.
- In-house staffing of Army program offices is nearly 50 percent greater than the Navy's, and the Air Force's staffing is about two and one-half times that of the Navy.
- The Navy compensates for this lower staffing level with a greater reliance on contract support services.
- Using the median value as a measure, the Air Force expends surprisingly little in-house effort on documentation and reporting (2.5 man-years). The Air Force also has an extremely low relative level of dependence on contract support services for these functions. This surprising combination is almost certainly a case of a misleading median value; the mean value was 7.5 man-years. A value somewhere between the median and mean values almost surely would be more representative. (More detailed data from another part of the report producers' questionnaire support this interpretation.)

#### *Burden on Senior Program Management*

The percentage of their time that senior program management officers (the program manager and his deputy, the class desk/engineering officer, the business and financial manager, and the contracting officer) spend in preparing and reviewing reports and documents is another way of measuring the reporting and documentation burden. Table 3 shows those percentages. The data displayed in table 3 do not include the effort involved in internal Service briefings, POM/budget drills, or pre- and post-Defense Acquisition Board actions.

Table 3. Percentage of senior program management officers' time spent in preparation and review (median value)

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Navy	-	25 percent
NAVAIR	-	30 percent
NAVSEA	-	23 percent
SPAWAR	-	18 percent
Army	-	10 percent
Air Force	-	15 percent

---

The senior staff of program offices in the Navy spend a substantial percentage of their time (median value = 25 percent) dealing with reporting and documentation requirements. This finding supports the premise of the original tasking memorandum that the "paperwork burden" is a serious drain on program management's attention and effort. Again, the impact seems most severe on the Naval Air Systems Command (median value = 30 percent). There are several possible explanations for this phenomenon, but almost certainly one of them is that NAVAIR places much less reliance on contractor support services for this function than do the other Navy Systems Commands.

The lower percentage of senior management time devoted to the paperwork burden in the Army (10 percent) and Air Force (15 percent) is probably due to the much larger in-house staffs available to their program managers; more of the burden can be delegated to junior personnel. (The study team's first-hand observation of the operations of Navy program offices and its more limited experience with Air Force program offices seem to substantiate this hypothesis.)

#### *Preparation Effort and Time for Approval of Specific Reports and Documents*

Analysis of the report producers' questionnaire yielded estimates of in-house preparation effort and time, as well as time for approval, for the ten key status reports and decision documents.<sup>1</sup>

As might be expected, status reports are much less demanding than decision documents. For example, Congressional Data Sheets (CDSs) take 40, 44, and 38 manhours (for the Air Force, Army, and Navy, respectively) and one to two weeks to prepare. Acquisition Plans (APs) on the other hand take 600, 300, and 167 manhours, respectively, and 8 to 12 weeks to prepare.

Even within these two major groupings, there are substantial differences among the individual reports and documents. For example, in the Navy, TEMPs take 300 manhours and 23 weeks to prepare, while SCPs take only 160 manhours and 12 weeks. Moreover, the differences among individual reports and documents seem in some cases to be Service-unique. For example, the Air Force, in general, invests more manhours and time in report and document preparation than the Army and Navy. In the case of the Cost and Operational Effectiveness Analysis (COEA) document, however, the Air Force invests only 190 manhours, while the Army and Navy each require 500 manhours. (Relative dependence on contract services support does not, in this case, affect the

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1. Times for approval were measured after the report or document had left the originating program office and include reviews within the parent Service as well as in the Office of the Secretary of Defense. Recycle time for rejected documents was also included. All of the estimates discussed here are, again, median values.



interpretation of these data. The explanation probably is that because this is a specialized function within the Air Force, it is done more efficiently.)

The study did not examine the causes of these differences. For example, there appears in general to be an intuitively appealing, but unanalyzed, inverse relationship between the effort and time devoted to report and document preparation and the time required for approval. The Air Force spends 280 manhours and eight weeks preparing SARs, but requires only four weeks to gain approval. The Army spends 200 manhours and four weeks and needs five weeks for approval; and the Navy spends 80 manhours and four weeks but requires eight weeks to gain approval. (Incidentally, the general thrust of these latter comparisons was borne out during the subsequent interview with reviewers of SARs in OSD.)

What is quite clear is the notably lower in-house manhours devoted to report and document preparation in the Navy compared with the Army and Air Force. In this case, the explanation almost surely involves the Navy's generally greater reliance on contract support services for this function.

Long approval times are worrisome to program managers. In interviews with program managers, they stressed that the time and effort spent in gaining approval for documents can be more of a burden than the preparation of documents. For example, one program manager cited a TEMP that took over a year to approve. When approval finally came, the TEMP was out of date and had to be redone. Median time required to approve Navy TEMPs is 26 weeks; at the 75th percentile, the time is 30 weeks.

In summary, CNA found that:

- Program managers and their staffs devote significant amounts of time to the preparation and review of even this selected group of status reports and decision documents.
- The Army and the Air Force use substantially more in-house staff hours (at all levels) than the Navy in preparing these ten key reports and documents. As noted in the discussion of the overall paperwork burden, the Navy's much greater relative dependence on contract support services for this function may explain the difference. The time and effort involved in preparing the ten key status reports and decision documents show considerable variation among program offices within each of the military departments.

- There seems to be an overall pattern of, "the more time and effort spent on report and document preparation, the less time required for review and approval."

#### *Duplication and Overlap*

Program managers reported strikingly similar reactions concerning data sources for reports, report overlap, and possibilities of eliminating some reports:

- At least 75 percent of the data in three of the primary status reports (Unit Cost Report, Congressional Data Sheet, and the Defense Acquisition Executive Summary) are readily available in other documents.
- In the Army and Navy, 35 percent or less of the data in three of the primary decision documents (Decision Coordinating Paper, Test and Evaluation Master Plan, and Cost and Operational Effectiveness Analysis) are readily available in other documents. In the Air Force, more than 35 percent of the data called for in two of these documents--the DCP and the TEMP--is readily available in other documents.
- The most frequently identified cases of overlapping involve the combination of the Selected Acquisition Report, the Defense Acquisition Executive Summary, the Unit Cost Report, the Congressional Data Sheet, and the Baseline document.
- Program managers believe that three of these status reports--the DAES, UCR, and CDS--could be eliminated with little impact on OSD or Congressional oversight, and that DAES could be eliminated without adverse impact on their own Service.

CNA's analysis of the ten key status reports and decision documents found that program managers' perceptions of considerable overlap in the content of documents, especially status reports, was well founded. Moreover, there was a burdensome lack of consistency in definitions, formats, and procedures among the reports.<sup>1</sup>

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1. The full range of the data from the producers' questionnaire will be reported in a forthcoming CNA research memorandum in this series.

## Defense Enterprise Program Status Provides Little Relief

The burdens described above are real. Yet the Defense Enterprise Program--which was designed to streamline and reduce reporting burdens in certain selected programs--provides little actual relief.

The Defense Enterprise Program was established by Congress in the Fiscal Year 1987 National Defense Authorization Act, section 905, now Title 10 United States Code (U.S.C.) Section 2436. According to 10 U.S.C. Section 2436, DEPs are programs designated by the Secretaries of the Military Departments, which, "except as specified by the senior procurement executive of the military department concerned, with the approval of the Under Secretary of Defense for Acquisition, ...shall not be subject to any regulation, policy directive, or administrative rule or regulation, policy directive, or administrative rule or guideline relating to the acquisition activities of the Department of Defense other than the Federal Acquisition Regulation and the Department of Defense Supplement to the Federal Acquisition Regulation." Section 2436 further states that this exemption "shall not be construed to limit or modify the application of Federal legislation relating to the acquisition activities of the Department of Defense."

The fact is, however, that 16 of the 22 most important DOD-wide acquisition reports and documents are required by law, FAR, or OMB Circular. Furthermore, of the six remaining self-imposed requirements, four would not willingly be given up by program managers because of their management value. Consequently, the documentation streamlining benefits of DEP status may be largely illusory. Table 4 shows the originating authorities for those reports and documents.

The analysis done for this study showed that DEP program managers face other problems as well:

- Functional specialist organizations within each of the military departments are reluctant to relinquish their department-unique reporting requirements (the "once-burned..." syndrome; some of those requirements grew out of past mistakes).
- A heavy briefing workload is involved in keeping buying command, sponsor, secretariat, and OSD offices informed. Program managers consider these briefings to be essential to protect their programs.

- DEP program managers are unable to make a real "contract" for program stability, even with approved baselines. The exigencies of the budget process make it impractical to "fence" stable DEPs at the expense of less stable but more important programs.
- DEPs are a special target for reductions in acquisition personnel, presumably because they have been "freed" of so much of their reporting burdens.

Table 4. Originating authority for DOD decision document and status reporting requirements

	10 U.S.C. section	Other
Selected Acquisition Report	2432	
Defense Acquisition Executive Summary		DODI 7220.32
Unit Cost Report	2433	
Unit Cost Exception Report	2433	
System Concept Paper		DODI 5000.2
Cooperative Opportunities Document	2407	
Acquisition Strategy Report	2438	
Common-Use Alternatives Statement		DODI 5000.2
Cost and Operational Effectiveness Analysis		DODI 5000.2
Competitive Prototyping Strategy Report	2365	
Test and Evaluation Master Plan		DODI 5000.3
Mission Need Statement		OMB Circular A-109
Independent Cost Estimate	2434	
Decision Coordinating Paper		DODI 5000.2
Program Baseline Document	2435	
Baseline Deviation Report	2435	
Manpower Estimate Report	2434	
Congressional Data Sheet	2431	
Program Element Descriptive Summary		OMB Circular A-11
Acquisition Plan	2305	
Business Clearance		FAR 1.602
Contract Award Report	2431	

## There Are Significant Inconsistencies in the Requirements for Baselines and Deviation Reporting

The concept of baselining--which involves a formal specification of, and agreement to, key program parameters and "baseline" values--is not new. The SAR, for example, has included a particularly strict form of baselining for many years.

Currently, there are a variety of statutes, directives, instructions, and policies that relate to baselines and deviations from those baselines. Baselines of some type, as well as criteria and mechanisms for reporting deviations from those baselines, are specified in 10 U.S.C. Section 2432, Selected Acquisition Reports; Section 2433, Unit Cost Reports and Unit Cost Exception Reports; Section 2435, Enhanced Program Stability; and Section 2437, Milestone Authorization for Defense Enterprise Programs.

In addition to these Congressionally mandated baselines, many of which have different data elements, deviation thresholds, and reporting mechanisms, OSD has implemented the concept of baselining through a variety of directives, instructions, and policy letters. These include DODD 5000.45, DODD 5000.1, DODI 5000.2, DODI 5000.50, DODI 7220.32, DODI 7000.3, and DODI 7220.31--plus USD(A) memoranda of 9 February 1988 and 7 March 1988 and their policy attachments. Each of these eleven pieces of guidance contains at least one unique requirement and, in most cases, is inconsistent with one or more elements in the other DOD policy documents or Title 10 provisions.

Program managers thus are faced with interpreting baselining guidance found in four statutes and 11 DOD documents. At the time CNA's analysis was performed, the 15 separate pieces of guidance called for data elements that are similar but not the same, different thresholds for deviations, different mechanisms for reporting deviations, and different consequences resulting from deviations.<sup>1</sup>

Clearly, the program manager is in a difficult position, from both a narrow technical aspect and a broader managerial perspective. Technically, the program manager must know and understand all of the rules and nuances of the complex and inconsistent baselining and deviation reporting requirements. From the broader managerial perspective, baselining may not bring the program stability, streamlined chain of documentation approvals, and decentralized decision authority originally envisioned by the Packard Commission.<sup>2</sup> The Commission

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1. A more detailed description of these inconsistencies and overlaps will be provided in a forthcoming CNA research memorandum.

2. The President's Blue Ribbon Commission on Defense Management, *A Quest for Excellence, Final Report to the President*, Jun 1986, p. 59. The report is often referred to as the Packard Commission Report after its chairman, David Packard.

expected that baselines would promote program stability by allowing program managers to manage within the confines of agreed-upon baseline "contracts." Because budgetary changes made in the Planning, Programming, and Budgeting System (PPBS) process are causes for automatic rebaselining, the program manager cannot count on a "contracted" level of resources, and thus a stable program.

The CNA study team proposed options, to be described in detail in a forthcoming research memorandum, for resolving or ameliorating most of the technical baselining problems described above. The study team did not, however, address the basic policy question of whether the baseline should or can be a method to ensure program stability or whether it should be viewed simply as a device to certify program executability at current funding levels.

#### **Report Users Had Mixed Views Concerning Report Usefulness, Quality, and Timeliness**

Heavy workload, duplicative and overlapping requirements, and inconsistent guidance can increase the vulnerability to error, misinterpretation, and delay. In order to gain insight into these and other issues, the CNA study team designed a questionnaire for use during in-person interviews with report users. The interviews were intended to get responses from report users regarding their perceptions of the timeliness, usefulness, and ease of use of the 22 major, DOD-wide reports and documents and then to lead the respondent to choose three or four of those documents on which to answer detailed questions. Another part of the questionnaire was designed to get more general comments regarding duplication of data and recommendations for improvement.

The documents and reports evaluated by the respondents varied among the user groups (Navy, OSD, OMB, CBO, and Congressional staffs). The only ones evaluated by more than one group were the Test and Evaluation Master Plan (TEMP), the System Concept Paper (SCP) or the Decision Coordinating Paper (DCP), the Congressional Data Sheets (CDS), and the Selected Acquisition Report (SAR).

In general, decision documents (such as the DCP or the AP) were seen as very informative, with strong influence over cost, schedule, performance, and acquisition mode. Data in the decision documents were not perceived as significantly overlapping. On the other hand, status reports (such as the SAR, DAES, and CDS) were considered as only moderately informative, noninfluential, and significantly overlapping.

Users were generally satisfied with the format and content of both the status reports and decision documents, except for the SAR. The SAR posed special difficulties--and opportunities--and will be discussed more extensively in a forthcoming CNA research memorandum in this series.

In summarizing the results of the questionnaire, the modal response is used for qualitative descriptors, and the mean value is used for quantitative responses. These modal and mean values are based on the six documents or reports that had five or more respondents. Some highlights follow:

- The average amount of time used in reviewing the documents or reports varied from 0.8 hour for the CDS to 11.3 hours for the TEMP to 13.3 for the DCP.
- Only the CDS had a modal response of "Never" to the question concerning the need for additional information, and it scored highest on ease of use.
- The CDS received the lowest mean score on perceived usefulness (except for the "problem child" SAR).
- Only the TEMP was reported as having relatively unduplicated information whereas, of the six reports or documents evaluated by five or more respondents, only the DAES was judged to have sections that could be eliminated without loss of significant information.
- Only the TEMP and DCP were considered very informative-- but the TEMP was easily the low scorer on timeliness.
- As might be expected, only the Acquisition Plan was a frequent driver of action with respect to system cost, schedule, performance, and acquisition mode.

In terms of the "freehand" comments from the report user interviewees, Congressional staffers expressed dissatisfaction with the organization and content of the SAR. They felt that it does not provide early warning about program troubles. In addition, they felt the advance SARs are not useful, and that OSD does not provide effective quality control for the SAR. Part of their complaint is that they see different documents (e.g. the SAR, CDS, and budget exhibits) with different numbers for apparently the same programs and parameters. What is not immediately apparent is that somewhat different definitions are in use and the "as of" dates are not always the same. Thus, Congressional staffs feel dissatisfied with the quality and the credibility of the SAR.

OSD interviewees also expressed concerns about the SAR, as well as the DAES and the TEMP. They would like a common data base for the DAES and the SAR, as well as automated production of the SAR. They also expressed concern about a fundamental dilemma of oversight: the conflict between wanting to have all the detailed program data to draw one's own conclusions and the need for a hierarchy of oversight with only exception reports going to the upper levels of management. They were also aware of the long document approval times, particularly for

the TEMP, and talked about the need for dual approval chains or the need to limit the amount of time any office can hold a document before approval becomes automatic.

Navy officials were most concerned about the AP. They see a need to simplify the AP approval process. Like OSD, they spoke of parallel "chop chains" and specific time limits for approvals as possible improvements.

In summary:

- Decision documents such as the SCP, DCP, the AP, and the TEMP (particularly the latter two) were found to be useful and influential, and to have little redundancy.
- Status reports were found to be less useful and much more duplicative.
- The SAR presented special problems to almost everyone, but the comments indicated it has the potential to become a powerful, useful, workload-reducing report.

All of this material is discussed in more detail in another research memorandum in this series.<sup>1</sup>

#### Not All Reporting Burdens Are Unwelcome

While the study established clearly that program documentation and reporting requirements are burdensome, and that much of the burden may be unnecessary, the study nevertheless found widespread recognition among program managers that documentation and reporting serve useful purposes.

In particular, program managers expressed their recognition that effective communications--particularly well-timed briefings--are essential to building support for their programs. They also recognize that program decision documents are necessary and (even to them) useful instruments of management--though they might not always agree with their format and content requirements.

The challenge, then, is to develop agreement on what the documentation and reporting requirements should be.

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1. CNA Research Memorandum 89-60, *Program Documentation and Reporting Requirements: a Summary of Responses to CNA's Questionnaire by Users of Program Documents and Reports*, by John E. Keller, Donald W. Rehorst, and Linda S. Brandt, May 1989.



## No Single Authority Can Control "The Solution"

If there is to be reform of program documentation and reporting requirements, then a central question is the responsibility and authority for reform.

The study found that no single authority can control all elements of the solution. As mentioned earlier, 22 DOD-wide reports and documents were examined for their sources of authority. Table 4 shows the outcome. Only six of the reports are purely a result of DOD requirements. All sixteen others stem from statute, OMB Circulars, or the FAR. Thus, any attempt to change or eliminate most of the major reports or documents would involve changes beyond the purview of DOD alone.

In summary, many levels would have to be involved in a comprehensive effort to streamline program documentation and reporting requirements.

- Modest changes are within the authority of the Navy, and some steps were being taken as CNA started the study. The study team recommended further steps, and those and others are being pursued.
- Some potential changes are within the authority of the Office of the Secretary of Defense, but even here authority is divided between the Under Secretary of Defense for Acquisition (USD(A)) and the Comptroller. Moreover, DOD-wide changes should involve inputs from, and the informed cooperation of, the military departments.
- Finally, some potential changes, notably in baselining and deviation reporting and in consolidation of status reports, would require legislation. In Congress, too, however, authority is divided: some issues are under the jurisdiction of the authorizing committees; some are under the jurisdiction of the appropriations committees.

## There is a Basis for Consensus and for Improvement

Finally, the study team believes that reductions in the program documentation and reporting burden are feasible, and that there is a basis for consensus on action, at least on limited reforms.

The study team identified a number of specific instances in which improvements can be made. Those instances formed the basis for the recommendations made to the Under Secretary of the Navy in August 1988. Since then, needed changes to regulatory language or legislation, which could form the basis for discussion and refinement, have been drafted and provided to the Navy. These "strawman" drafts are intended to reduce the inconsistencies and the reporting burden with which

program managers have to cope, yet not deny users any useful data or insights they now get. The proposed changes in directives and in statutes will be presented in another forthcoming CNA research memorandum in this series.

The study team also found users to be receptive to reform. In particular, Congressional staff members indicated that they would be willing to accept reformatting the SAR and abolishing the UCR, UCER, and CDS if the new format for the SAR were negotiated with them. The central point was that the new SAR would have to be complete and credible. They also indicated that they would like to see automation of the SAR for ease of use.

These are grounds for optimism. The study team's analysis, however, did not go much beyond the mechanical aspects of program documentation to the larger issues of tension between disclosure and management flexibility, or to fundamental differences of view on the merits of individual programs. Such tensions and differences are inherent in the acquisition process, and are not amenable to improvement through administrative reform.

#### RECOMMENDATIONS

The following are the most important of the study team's recommendations:

**Resolve Inconsistencies in Policies and Procedures for Documenting and Reporting Baselines, Deviations, and Penalties.**

CNA has provided an analysis of the points requiring resolution and has proposed language changes in the relevant statutes and directives. Implementation would require an OSD/interservice/Congressional effort to consolidate and harmonize the revised guidance, an effort that is now underway.

**Replace Several Status Reports With One Report.**

The study found that there are two basic alternatives for dealing with overall reporting requirements. The first would be a long-term solution: creation of a comprehensive, automated acquisition data base. The second and considerably shorter-term solution would be to modify an existing report to serve multiple purposes. This solution would ameliorate the problem of report overlap, standardize data elements, and simplify report writing, scheduling, and deviation reporting for program managers. In addition, it would help eliminate the apparent inconsistencies found in similar but separate reports.

SARs contain most of the data elements found in other status reports. Since users are concerned with the ease of use, completeness, and reliability of the data in the SARs, reformatting to address these concerns could make the data more useful. For example, the addition of an executive summary would make the SARs more accessible to a broader

range of Congressional staffs, and could be of greater use to Members themselves. The second part of the SAR would continue to provide all of the details now furnished in the current SAR, plus certain additions from other reports. Automation of the SARs would help with both preparation and use.

A reformatted SAR could replace a number of reports, including the old SAR, the UCR, the UCER (while retaining the SECDEF certification portion), and the CDS. If done appropriately, it could also meet the baselining requirements of 10 U.S.C. Section 2435. Based on the interviews conducted, the study team believes a reformatted SAR would be well accepted if it were complete and credible.

A "strawman" version of a reformatted SAR has been developed and will be presented and discussed in a forthcoming CNA research memorandum.

#### **Examine the Potential For Changes in Decision Documents.**

While complete elimination of any decision document is not desirable, several changes are worth examining. The format and content of major decision documents such as the Mission Needs Statement (MNS), SCP, DCP, TEMP, and AP are not prescribed by law. Changes for most of these documents are within the authority of USD(A) to make since DOD Instruction 5000.2 prescribes them. (Even the AP prescribed in the FAR is amenable to some format and content change.) Greater consistency of data elements, content, and format would surely facilitate their preparation and use, with a consequent reduction in workload and potential for error.

Greater consistency between decision documents and related status reports would also be desirable to facilitate tracking between decisions and results. Developing specific suggestions would require considerable additional research, and the study team has not yet attempted this work.

#### **Simplify and Speed Up the Review and Approval Process.**

The report producers' questionnaire results show long review and approval times, particularly for decision documents such as TEMPs and APs. The streamlined chain of decision approvals does not always lead to a streamlined chain for documentation and reporting requirements. Enforcement of a streamlined document approval chain would provide relief initially to DEP managers. The principle could then be considered for selective application to non-DEP programs.

Another potential change would involve further selective delegation of approval authority within the Services from their secretariats to PEOs.

Adoption of a "silence is assent" policy could greatly shorten

approval times, particularly for decision documents. Since program managers indicated that the time needed to gain approvals is often more of a burden than the report itself, this policy could be effective in the near term.

#### **Provide Aid to Navy PMO Staffs for Document and Report Preparation.**

Navy PMO staffs are small. It might be appropriate to augment those staffs by considering such actions as program office consolidations and personnel shifts both within and among the Systems Commands. This would be especially necessary if the use of contractor support to handle a growing workload remains an issue.

Other suggestions include providing program managers with automated tools for acquisition planning, and providing formal training to PMO staffs in report preparation, especially the large and difficult TEMPs and APs.

#### **SUMMARY**

In conclusion, this study found:

- Documentation and reporting requirements are, indeed, burdensome, with considerable variation by report and by Service.
- There is heavy overlap in the content of status reports, with subtle but important differences in data elements and their definitions, as well as differences in formats and timing.
- The relief from reporting requirements offered by DEP status may be largely illusory because a large portion of reporting requirements and acquisition procedures are based in law or FAR/DFAR, and because DEP program managers still need to carry a heavy briefing load.
- There are significant problems in guidance for baselines and reporting deviations from the baselines, including multiple and inconsistent sources of guidance on the rules for changing baseline values, and multiple and inconsistent criteria for deviations, deviation reporting, and associated penalties.
- Producers of reports would prefer to consolidate status reports and keep decision documents. They do, however, find the long review and approval times associated with decision documents to be particularly burdensome.

- Users of reports would not do away with any currently available information, but would find reformatting and consolidation of status reports an acceptable solution--if the resultant reports were complete and credible.
- There are numerous possibilities for improvement, some achievable in the short term, others requiring a longer-term effort. CNA's recommendations, if implemented, could provide some real and relatively prompt relief to program managers, as well as improve products for the end users of acquisition-related reports and documents.

**APPENDIX A**  
**QUESTIONNAIRE SUMMARY CHARTS**

## APPENDIX A

### QUESTIONNAIRE SUMMARY CHARTS

A CNA questionnaire was administered to program managers and their staffs to determine their views of the documentation and reporting process. Among other items of information, the questionnaire elicited estimates of the amount of time and effort spent on preparation and review of ten key DOD-wide documents and reports. These so-called producer questionnaires were completed by 45 Navy program offices (with all three major hardware Systems Commands represented), 25 Air Force program offices and 15 Army program offices.

This appendix contains nine charts that provide a detailed summary of the program management offices' estimates of preparation effort and time and time required for approval. The charts use the so-called box-plot technique. For each measure, for each military department, and for each status report and decision document, the box plot format provides: (a) median values, (b) 25th and 75th percentile values, (c) 10th and 90th percentile values; (d) individual high and low outliers within the range of the vertical scale, and (e) the value of outliers beyond the scale of the vertical axis.

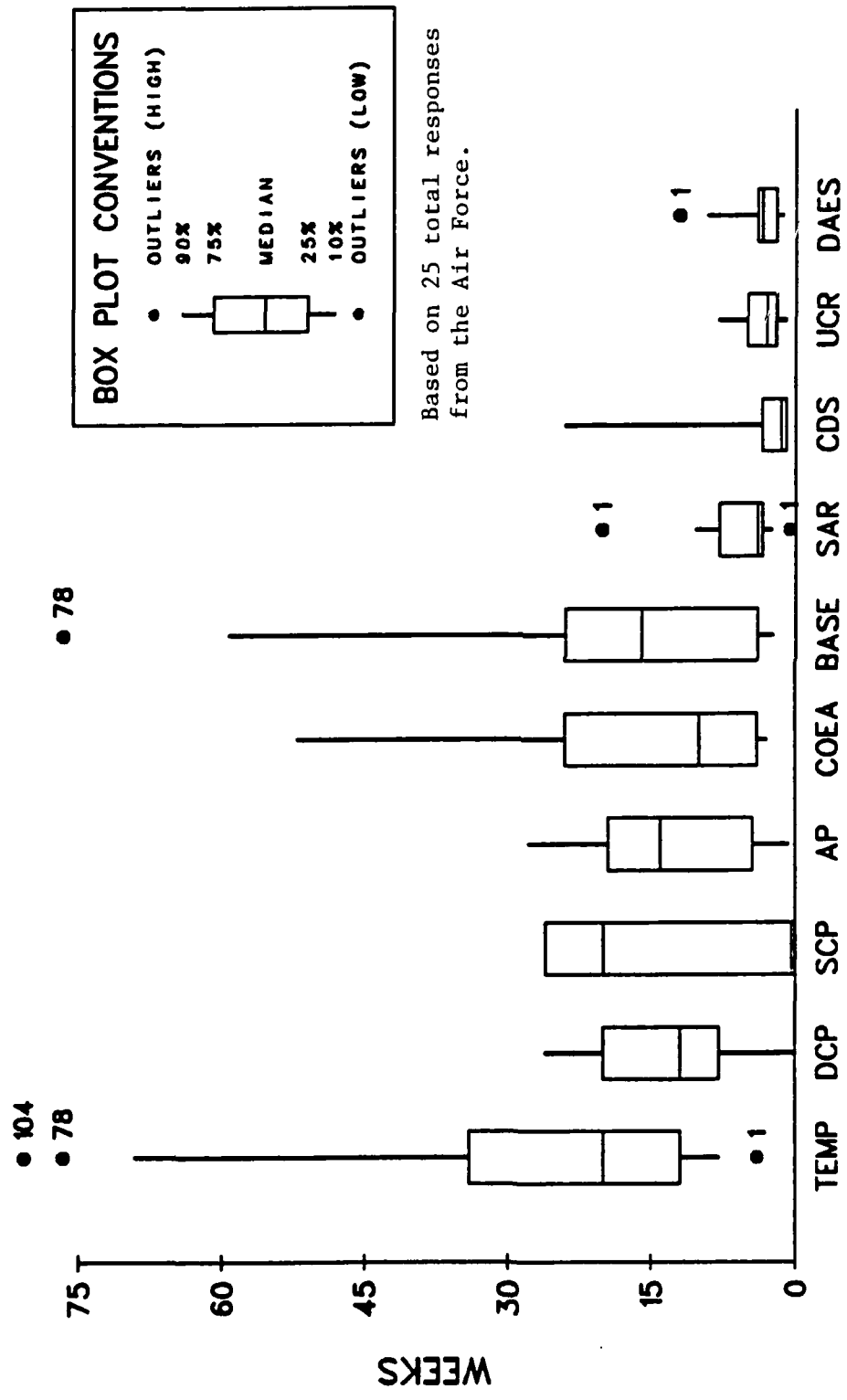


Figure A-1. Time required to complete review and/or approval process: Air Force documents



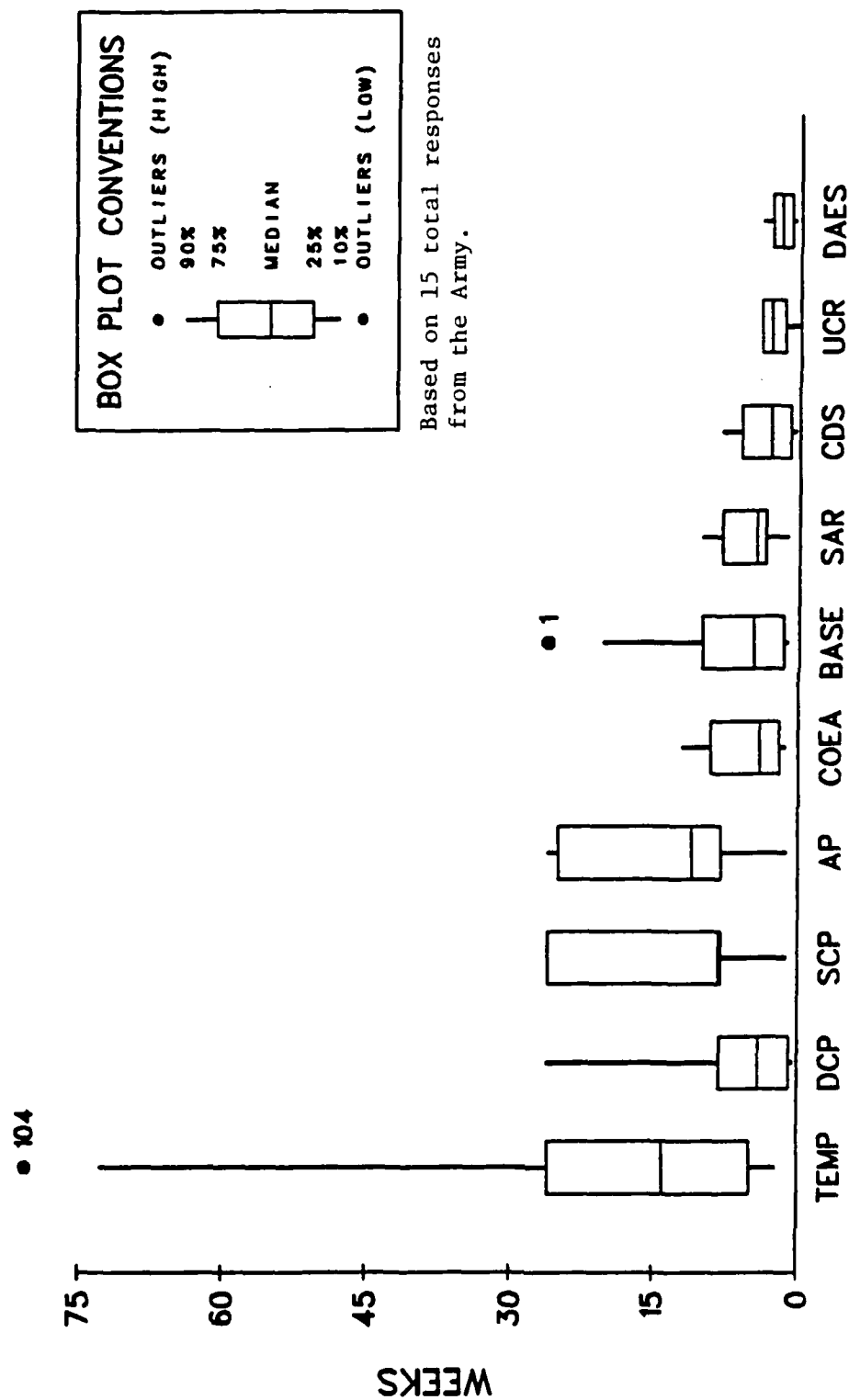


Figure A-2. Time required to complete review and/or approval process: Army documents

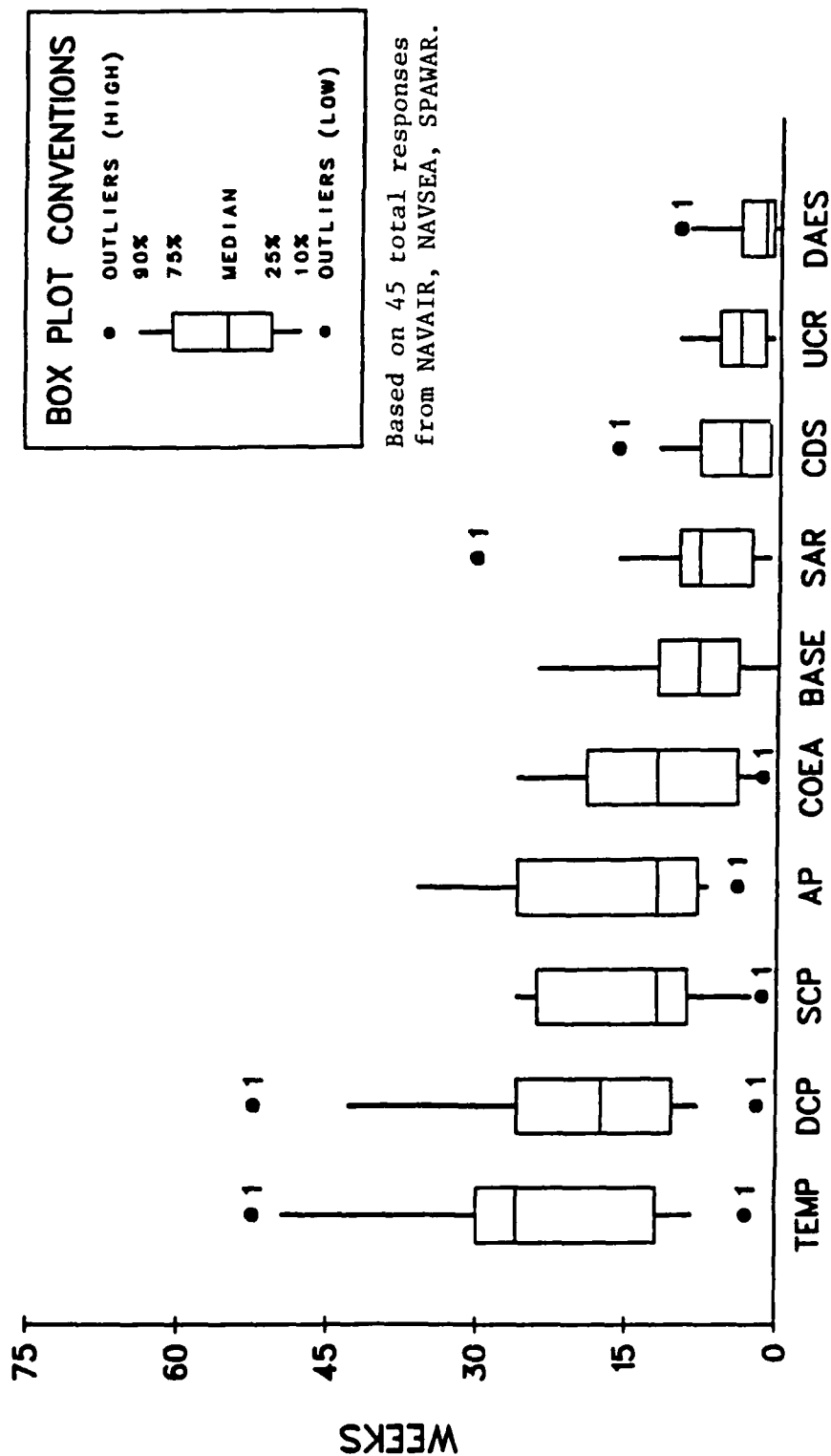


Figure A-3. Time required to complete review and/or approval process: Navy documents

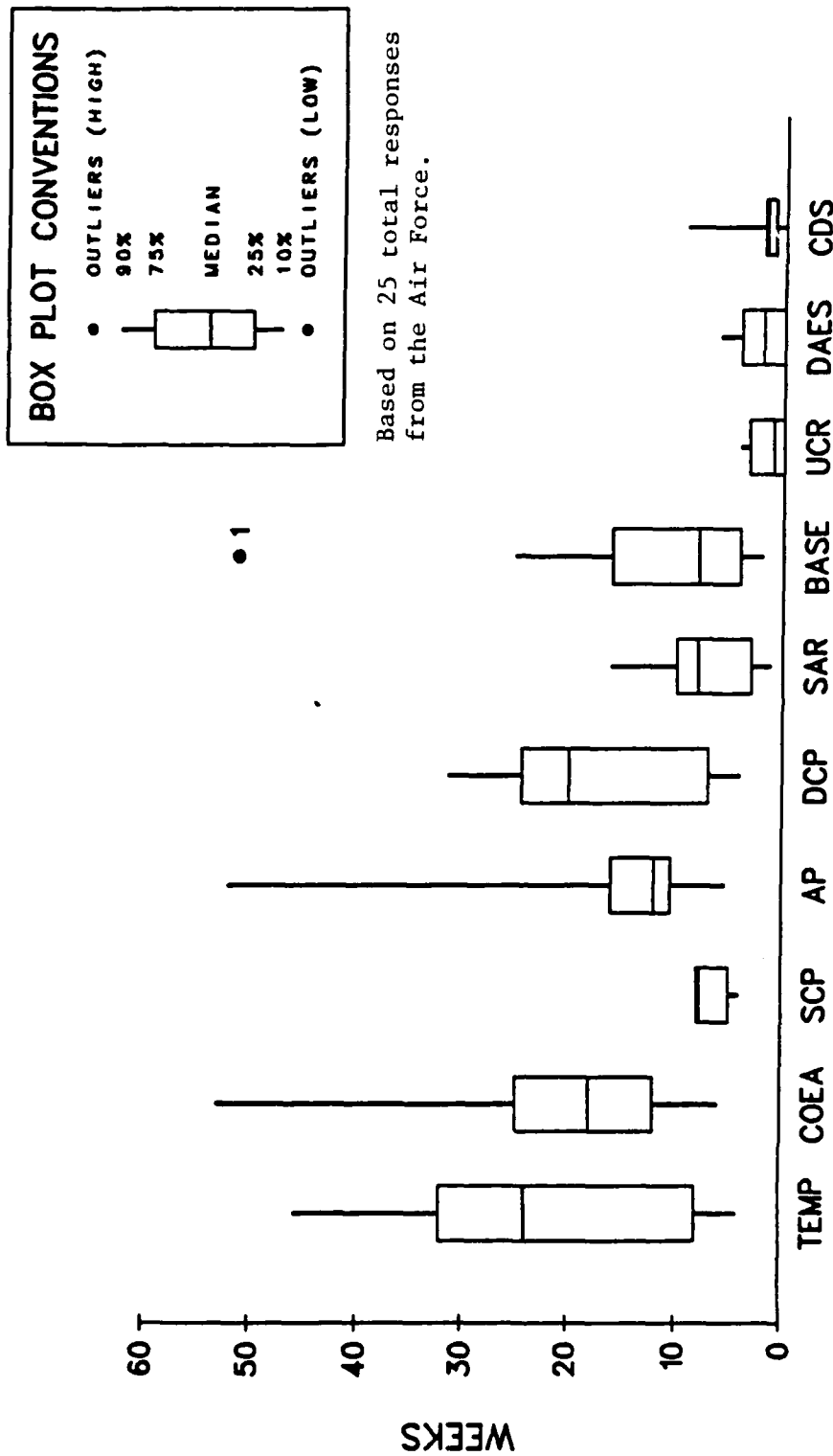
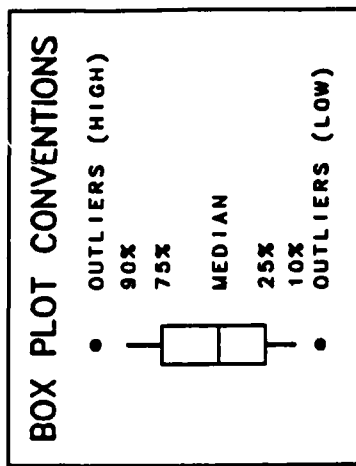


Figure A-4. Time required for preparation of documents by PMO: Air Force documents



Based on 15 total responses from the Army.

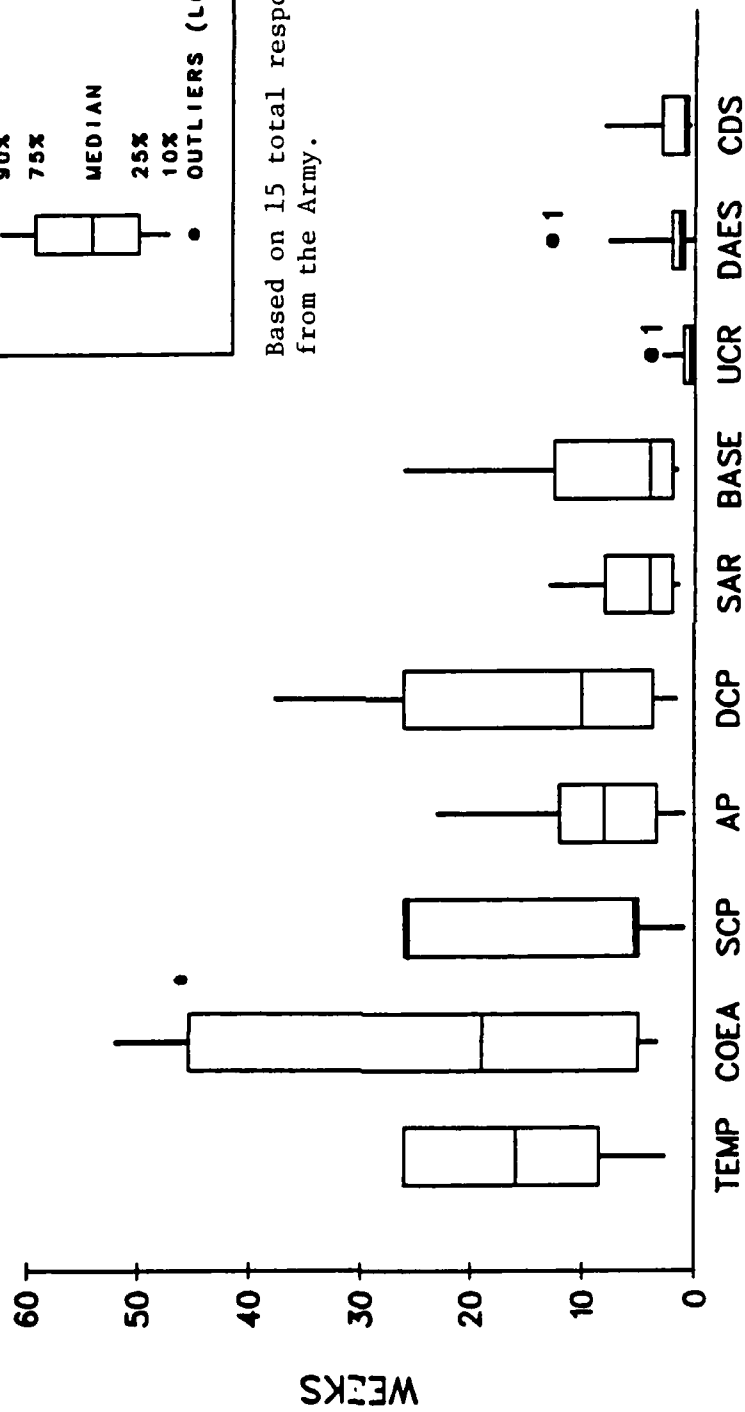


Figure A-5. Time required for preparation of documents by PMO: Army documents

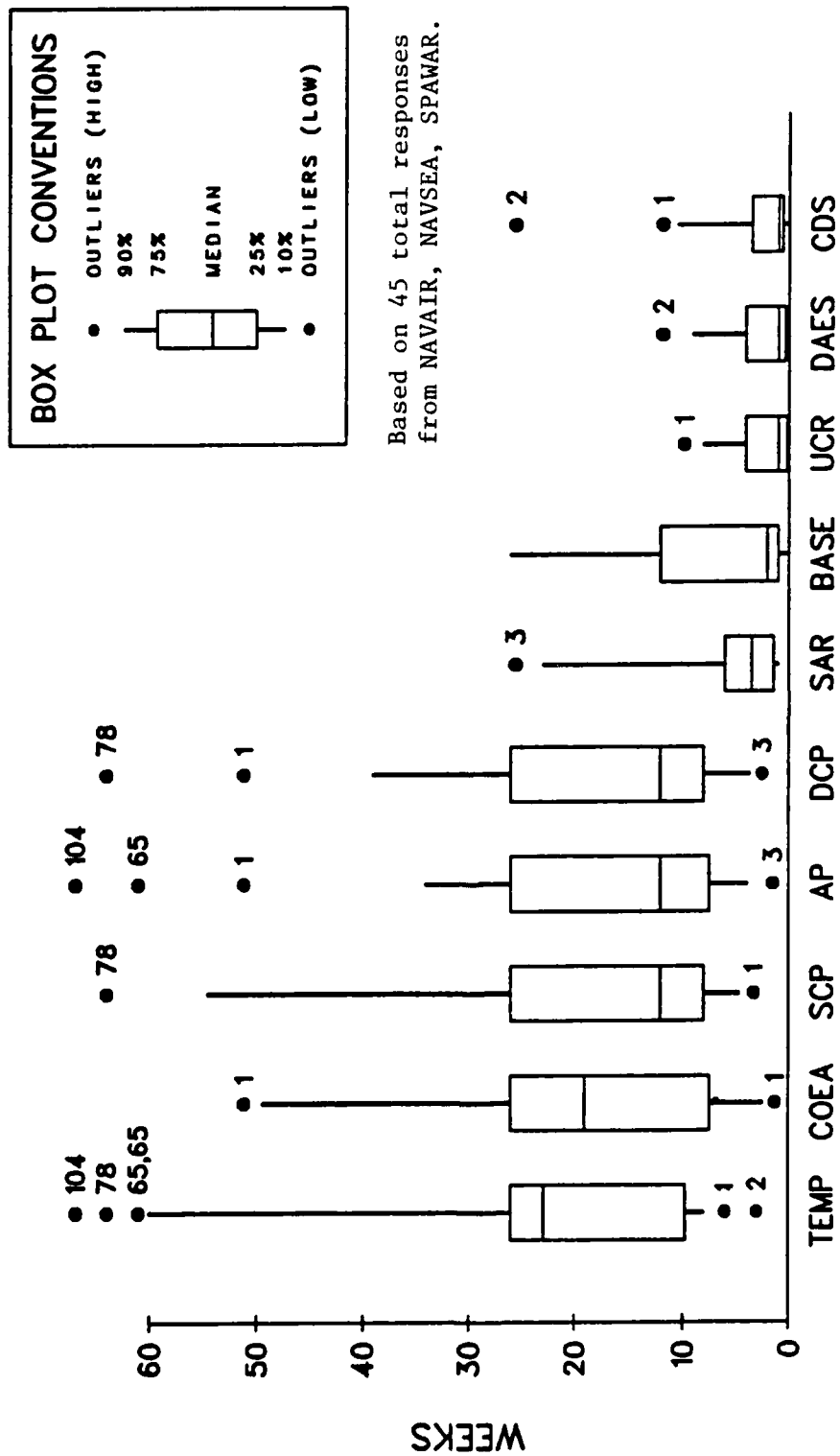


Figure A-6. Time required for preparation of documents by PMO: Navy documents

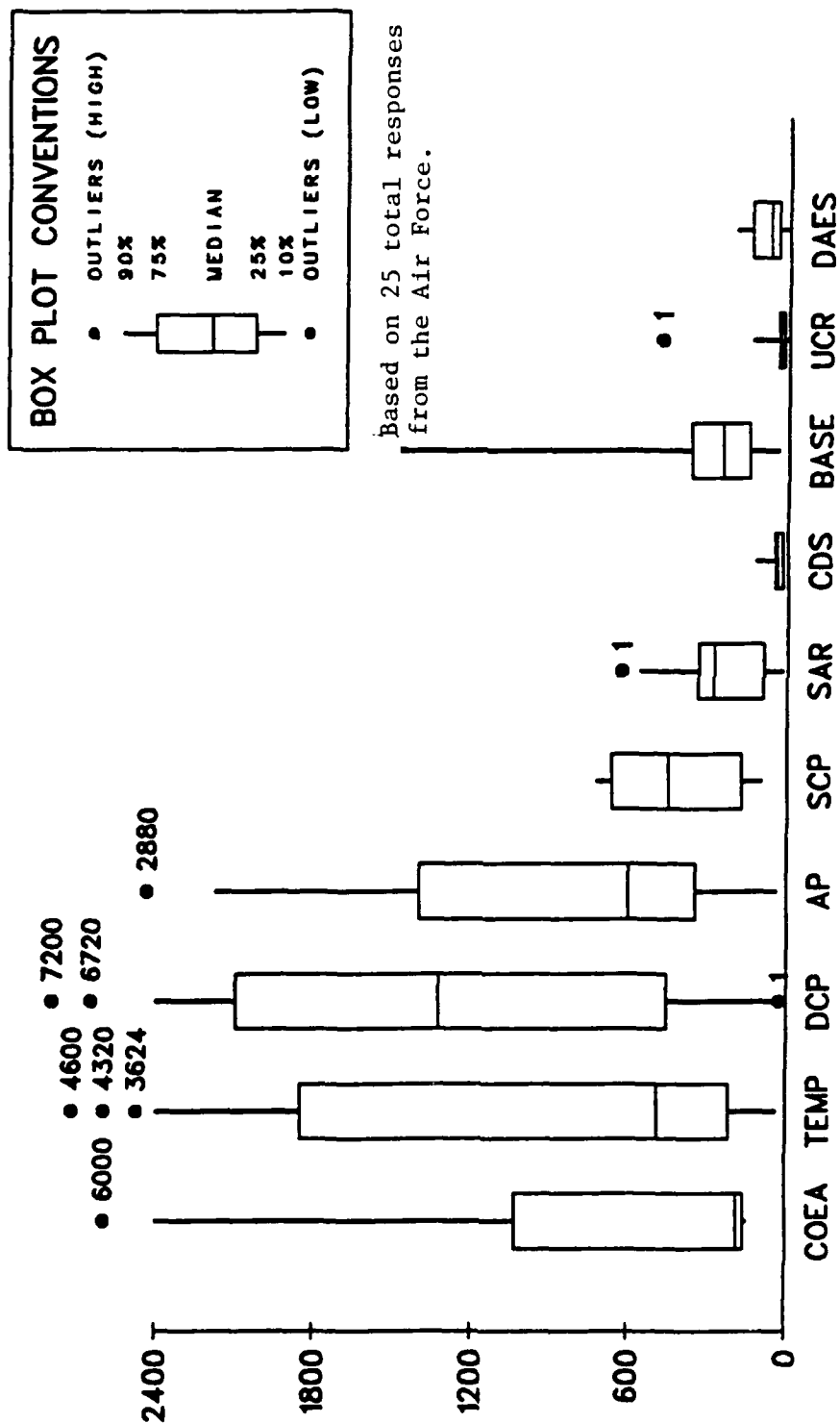


Figure A-7. In-house manhours required for preparation of documents: Air Force documents

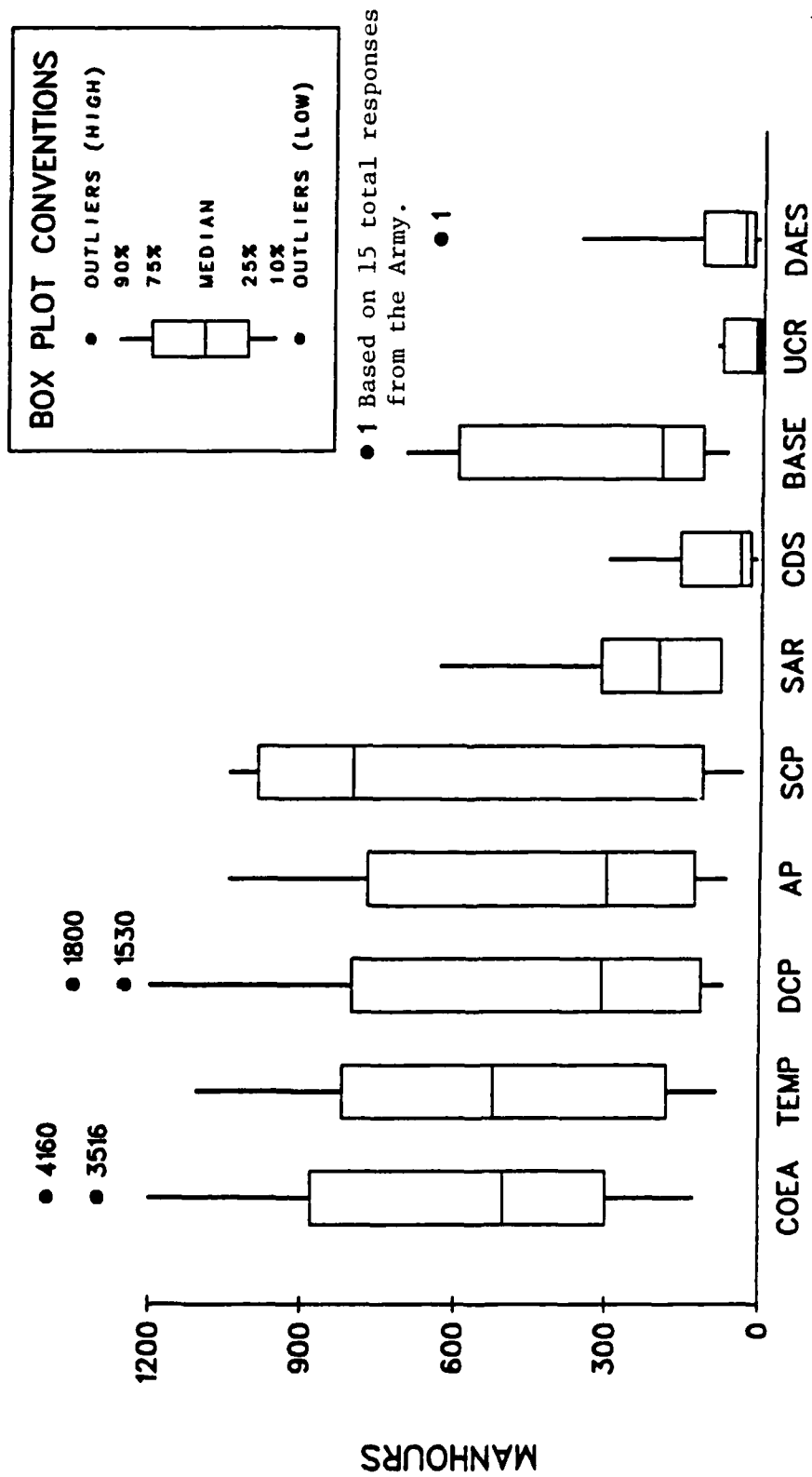


Figure A-8. In-house manhours required for preparation of documents: Army documents

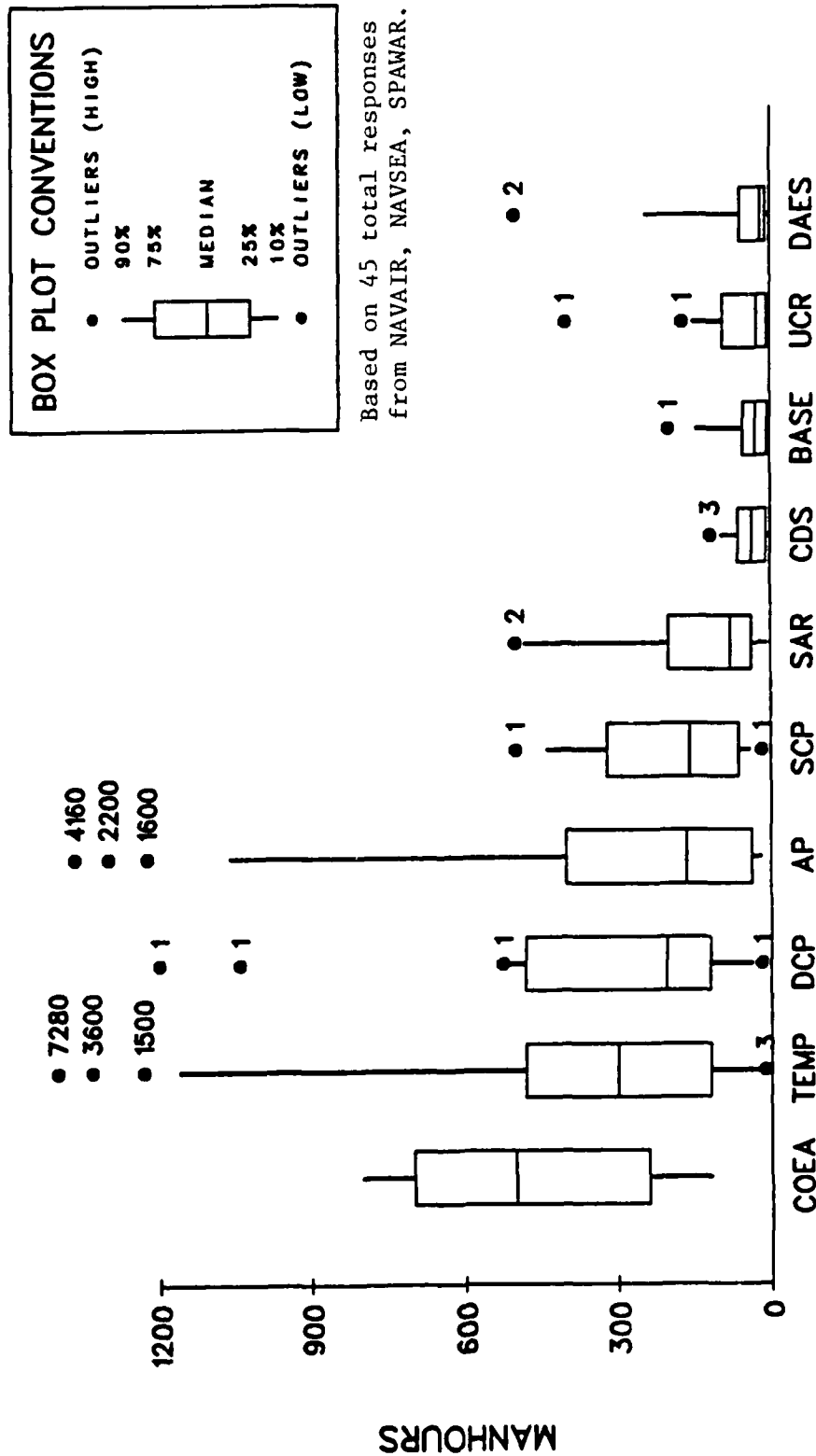


Figure A-9. In-house manhours required for preparation of documents: Navy documents